

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-3 (Canceled).

Claim 4 (Currently Amended): A transmission photodetector comprising:

a first transparent electrode;

a second transparent electrode, at least one of the first and second transparent electrodes being divided into a plurality of electrode cells; and

a photoelectric transfer part sandwiched between the first and second transparent electrodes, the photoelectric transfer part being common to the plurality of electrode cells,

wherein the first and second transparent electrodes, and the photoelectric transfer part are arranged in an optical path so that light transmitted in the optical path passes through the photodetector, and

wherein the photodetector is configured to receive light from outside the photodetector directly on both [[on]] a first surface of the first transparent electrode and a second surface of the second transparent electrode,

wherein the photoelectric transfer part comprises an organic p-type semiconductor layer stacked on the first transparent electrode, and an organic n-type semiconductor layer stacked on the organic p-type semiconductor layer, and

wherein the second transparent electrode is stacked on the organic n-type semiconductor layer.

Claims 5 and 6 (Canceled).

Claim 7 (Currently Amended): A transmission photodetector comprising:

- a first transparent electrode;
- an organic p-type semiconductor layer stacked on the first transparent electrode;
- an organic n-type semiconductor layer stacked on the organic p-type semiconductor layer; and
- a second transparent electrode stacked on the organic n-type semiconductor layer,

wherein at least one of the first and second transparent electrodes is divided into a plurality of electrode cells,

wherein the first transparent electrode, the organic p-type semiconductor layer, the organic n-type semiconductor layer, and the second transparent electrode are arranged in an optical path so that light transmitted in the optical path passes through the photodetector, and

wherein the photodetector is configured to receive light from outside the photodetector directly on both ~~[[on]]~~ a first surface of the first transparent electrode and a second surface of the second transparent electrode.

Claim 8 (Currently Amended): A stacked type photodetector comprising:

- a first transmission photodetector configured to carry out a photoelectric transfer with respect to light in a first wavelength band including a predetermined wavelength; and
- a second photodetector, stacked on the first transmission photodetector, configured to detect light passing through the first transmission photodetector,

wherein the first and second photodetectors are arranged in an optical path so that light transmitted in the optical path passes through the stacked type photodetector, and

wherein the stacked type photodetector is configured to receive light from outside the stacked photodetector directly on both ~~[[on]]~~ a first surface of the first ~~transparent electrode~~

transmission photodetector and a second surface of the second ~~transparent electrode~~  
photodetector.

Claim 9 (Original): The stacked type photodetector according to claim 8, wherein the first transmission photodetector comprises:

- a first transparent electrode;
- a transparent semiconductor layer stacked on the first transparent electrode;
- a sensitizing dye film stacked on the transparent semiconductor layer;
- a second transparent electrode; and
- a carrier transporting layer sandwiched between the sensitizing dye film and the second transparent electrode.

Claim 10 (Previously Presented) The stacked type photodetector according to claim 8, wherein the first transmission photodetector comprises:

- a first transparent electrode;
- a transparent semiconductor layer stacked on the first transparent electrode;
- a sensitizing dye film stacked on the transparent semiconductor layer;
- a second transparent electrode; and
- a dielectric layer sandwiched between the sensitizing dye film and the second transparent electrode.

Claim 11 (Original): The stacked type photodetector according to claim 8, wherein the first transmission photodetector comprises:

- a first transmission electrode;

an organic p-type semiconductor layer stacked on the first transparent electrode;  
an organic n-type semiconductor layer stacked on the organic p-type semiconductor layer; and  
a second transparent electrode stacked on the organic n-type semiconductor layer.

Claim 12 (Canceled).

Claim 13 (Previously Presented): The stacked type photodetector according to claim 9, wherein the second photodetector has a third transparent electrode, and at least one of the first or second transparent electrode of the first photodetector and the third transparent electrode of the second photodetector is divided into a plurality of electrode cells.

Claim 14 (Previously Presented): The stacked type photodetector according to claim 10, wherein the second photodetector has a third transparent electrode, and at least one of the first or second transparent electrode of the first photodetector and the third transparent electrode of the second photodetector is divided into a plurality of electrode cells.

Claim 15 (Previously Presented): The stacked type photodetector according to claim 11, wherein the second photodetector has a third transparent electrode, and at least one of the first or second transparent electrode of the first photodetector and the third transparent electrode of the second photodetector is divided into a plurality of electrode cells.

Claim 16 (Currently Amended): A stacked type photodetector comprising:

a first transmission photodetector configured to carry out a photoelectric transfer with respect to light in a first wavelength band including a predetermined wavelength;

a second photodetector configured to detect light passing through the first transmission photodetector; and

a transparent substrate provided between the first and second photodetectors, the transparent substrate including two principal planes placed on opposite sides,

wherein the first transmission photodetector comprises first and second transparent electrodes, the second transparent electrode being provided on one principal plane of the transparent substrate, and the second photodetector has a third transparent electrode provided on the other principal plane of the transparent substrate,

wherein the first and second photodetectors are arranged in an optical path so that light transmitted in the optical path passes through the stacked type photodetector, and

wherein the stacked type photodetector is configured to receive light from outside the stacked photodetector directly on both ~~[[on]]~~ a first surface of the first transparent electrode and a second surface of the second ~~transparent electrode~~ photodetector.

Claim 17 (Original): The stacked type photodetector according to claim 16, wherein each of the second and third transparent electrodes is divided into a plurality of electrode cells, the plurality of electrode cells of the second transparent electrode being the same dividing pattern as those of the third transparent electrode.

Claim 18 (Canceled).

Claim 19 (Previously Presented): The stacked type photodetector according to claim 17, wherein the plurality of electrode cells are disposed symmetrically with respect to a center on the optical axis of incident light.

Claim 20 (Original): The stacked type photodetector according to claim 16, wherein the second photodetector has a fourth transparent electrode provided so as to face the third transparent electrode, and

each of the first and fourth transparent electrodes has a constant potential during operation.

Claim 21 (Previously Presented): The stacked type photodetector according to claim 17, further comprising a signal processor, integrally provided with the photodetector, configured to process an electric signal every one of the divided electrode cells, the electric signals being obtained from the first and second transmission photodetectors via each of the second and third transparent electrodes.

Claim 22 (Original): The stacked type photodetector according to claim 8, wherein a second wavelength band photoelectric-transferred by the second photodetector includes a longer wavelength component than that of the first wavelength band photoelectric-transferred by the first transmission photodetector.

Claim 23 (Original): The stacked type photodetector according to claim 9, wherein a second wavelength band photoelectric-transferred by the second photodetector includes a

longer wavelength component than that of the first wavelength band photoelectric-transferred by the first transmission photodetector.

Claim 24 (Original): The stacked type photodetector according to claim 10, wherein a second wavelength band photoelectric-transferred by the second photodetector includes a longer wavelength component than that of the first wavelength band photoelectric-transferred by the first transmission photodetector.

Claim 25 (Original): The stacked type photodetector according to claim 11, wherein a second wavelength band photoelectric-transferred by the second photodetector includes a longer wavelength component than that of the first wavelength band photoelectric-transferred by the first transmission photodetector.